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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,030	09/27/2001	Yoshikatsu Niwa	450100-03503	2594

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EXAMINER

SHIN, KYUNG H

ART UNIT PAPER NUMBER

2143

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/965,030	Applicant(s) NIWA, YOSHIKATSU ET AL	
	Examiner Kyung H. Shin	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 5, 6, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/7/2006 has been entered.
2. This action is responding to application papers filed 8/7/2006. Claims **1, 2, 5, 6, 9, 10** are pending. Claims **1, 5, 9, 10** have been amended. Claims **3, 4, 7, 8, 11, 12** have been canceled. Independent claims are **1, 5, 9**.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims **1, 5, 9** rejected under 35 U.S.C. 112, **first** paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. (*see Remarks Page 7, Lines 13-14*) and (*see Remarks Page 7, Lines 15-17*).

### ***Response to Arguments***

5. Applicant's arguments filed 8/7/2006 have been fully considered but they are not persuasive.

5.1 Applicant argues that the referenced prior art does not disclose "... the data transfer apparatus being connected to the second bus through a second data transfer apparatus ..." (*see Remarks Page 7, Lines 13-14*); "... transferring means for transferring the data from the data transfer apparatus to the second data transfer apparatus according to the destination information ..." (*see Remarks Page 7, Lines 15-17*)

Claims 1, 5, 9 rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material which is not supported by the prior patent is as follows (refer MPEP 14.22.01):

(*see Remarks Page 7, Lines 13-14*) and (*see Remarks Page 7, Lines 15-17*).

Applicant is required to cancel the new matter in the reply to this Office Action

There is no disclosure of a second data transfer apparatus in the specification or the original claims. This introduces *new matter* (i.e., matter which is not supported by the disclosure as originally filed).

The term "second" only appears in the Specification at:

a) original claims 9 and 10, as "*second step*";

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- b) paragraph [0007], as "*second shield*"; and
- c) paragraph [0043], as "*second step*".

5.2 Applicant argues that the referenced prior art does not disclose the proper motivation for the combinations of the **Yeung, Bastiani, Takabatake**, and **Lappetelainen** prior art references. (see Remarks Page 7 - 9)

The rejection for each independent and dependent claim includes a citation from the referenced prior art that discloses the basis for the rejection. Each obviousness combination clearly indicates the claim limitation the combined reference prior art teaches. In addition, a cited passage from the referenced prior art clearly indicates the motivation for the obviousness combination. **Each obviousness combination's disclosure is equivalent to the applicant's claimed invention.**

5.3 In conclusion, the examiner has considered the Applicant's remarks concerning the data transfer apparatus operational between two bus interfaces. All claims in Applicant's invention have been rejected as anticipatory or obvious based on the referenced prior art.

After the additional analysis of the applicant's invention, remarks, and an additional search of the available prior art, it was determined that the current set of prior art consisting of **Yeung (6,643,702)**, **Bastiani (6,636,922)**, **Takabatake (6,728,244)**,

and **Lappetelainen (6,693,915)** discloses the applicant's invention including disclosures in Remarks dated August 7, 2006.

***Claim Rejection – 35 USC § 103***

6. **Claims 1, 2, 5, 6, 9, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yeung** (US Patent No. 6,643,702) in view of **Bastiani et al.** (US Patent No. 6,636,922) and further in view of **Takabatake** (US Patent No. 6,728,244) and further in view of **Lappetelainen et al.** (US Patent No. 6,693,915).

**Regarding Claims 1 (Currently Amended), 5 (Currently Amended), 9 (Currently Amended)**, Yeung discloses a data packet processing apparatus, network system, data transfer method for connecting a plurality of buses and for transmitting data through a first one of the plurality of buses to a second one of the plurality of buses, according to destination information related to the data, the data transfer apparatus being connected to the second bus through a second data transfer apparatus. (see Yeung col. 2, lines 44-56: “ ... a switch ... number of ingress ports and egress ports in the switch may vary depending on ... how many devices or buses are served by the switch ... ”) Yeung does not disclose determining that the destination node is not connected. However, Bastiani discloses a data transfer apparatus, network system, data transfer method for connecting buses the data transfer apparatus comprising:

- a) transferring means for transferring the data from the data transfer apparatus to the second data transfer apparatus according to the destination information;  
(see Yeung col. 2, lines 44-56; col. 3, lines 5-12: data transfer between buses (i.e. input, output), **no** second data transfer apparatus)
- b) determining means for determining according to the destination information whether a node serving as a destination of the data is connected to the second bus, wherein, when the determining means determines that the node is not connected, a data transmission source receives a predetermined error information signal; (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path failure determination, destination node not connected (i.e. path failure), predetermined alarm (i.e. action: error bits set, packet processed as error packet) completed)
- c) wherein at least one packet of the data, transmitted to the node that is not connected, is processed as an error packet; (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path failure notification, destination node not connected (i.e. path failure), predetermined alarm (i.e. action: error bits set, packet processed as error packet) completed) and
- d) wherein the destination information comprises a node ID and a bus ID. (see Bastiani col. 11, lines 36-40; col. 12, lines 22-24: device addressing (i.e. node ID, bus ID) utilized for communications ; col. 10, lines 59-63; col. 12, lines 39-43: interface (i.e. bus, port) addressing utilized)

Yeung does not disclose an IEEE 1394 bridge based on the BRAN specification.

- e) However, Lappetelainen discloses that the BRAN specification is equivalent to the HIPERLAN specification (see Lappetelainen col. 1, lines 46-51: HIPERLAN specification equal to BRAN specification) and Takabatake discloses an IEEE 1394 bridge based on the HIPERLAN specification. (see Takabatake col. 21, lines 49-53; col. 3, lines 56-61; col. 8, lines 24-29: HIPERLAN (High Performance Radio Access Network) specification and wireless IEEE 1394 standards for a network device used in data transmissions) Therefore, the combination of Takabatake and Lappetelainen discloses the data transfer apparatus according to claims 1, 5, 9, wherein the data transfer apparatus is an IEEE-1394 bridge device conforming to the BRAN specification.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine connection availability of destination node and to process communications failure as taught by Bastiani, and to utilize a wireless IEEE 1394 device operating as a bridge based on the BRAN (HIPERLAN) specification as taught by Takabatake and Lappetelainen. One of ordinary skill in the art would be motivated to employ Bastiani in order to provide and optimize a more robust communications protocol between systems and peripherals in an interconnected network environment (see Bastiani col. 2, lines 19-22: “... *providing an advanced serial protocol (ASP) that defines a more robust data transmission environment for communication between host computers and*



*peripheral devices ...”), and to employ Takabatake in order to interconnect IEEE 1394 buses to more effectively utilize wireless (i.e. radio) resources within an interconnected network environment (see Takabatake col. 1, lines 12-16: “ ... realizing data transfer between interconnected different networks by identifying packets on each network, managing correspondences of packets between different networks, and converting packets ...”), and to employ Lappetelainen in order to effectively optimize performance of radio based communications (see Lappetelainen col. 4, lines 52-57: “ ... attain more effective utilization of the radio resources ... produce a more disturbance-free data transmission system ...”).*

**Regarding Claims 2 (Currently Amended), 6 (Currently Amended),** Yeung does not disclose the determination that the destination node exists on a network. However, Bastiani discloses the data transfer apparatus, network system, data transfer method according to claims 1, 5, wherein the means for determining determines according to the destination information whether the bus to which the node serving as the destination of the data is connected, exists on a network, and wherein when the bus does not exist, transmits predetermined error information to the data transmission source. (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path analysis and failure notification sequence or predetermined alarm (action) is completed when it is determined that destination node is not connected or path fault)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine that the destination node is not

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connected and to process communications fault as taught by Bastiani. One of ordinary skill in the art would be motivated to employ Bastiani in order to provide and optimize a more robust communications protocols between systems and peripherals in an interconnected network environment. (see Bastiani col. 2, lines 19-22)

**Regarding Claim 7 (Currently Amended)**, Yeung discloses the data transfer apparatus, network system, data transfer method according to claim 5, wherein the data transfer apparatus is connected to the second bus through a second data transfer apparatus, and the data transfer apparatus further comprises transfer means for transferring the data from the data transfer apparatus to the second data transfer apparatus according to the destination information. (see Yeung col. 2, lines 44-56: destination network node is another data processing apparatus)

**Regarding Claim 10**, Yeung does not disclose the determination that the destination node exists on a network. However, Bastiani discloses the data transfer apparatus, network system, data transfer method according to claim 9, wherein, in the second step, it is determined according to the destination information whether the bus to which the node serving as the destination of the data is connected, exists on a network, and when the bus does not exist, predetermined error information is transmitted to the data transmission source. (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path analysis and failure notification sequence or predetermined alarm (action) is completed when it is determined that destination node is not connected or a communications path failure)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine that the destination node is not connected and to process communications fault as taught by Bastiani. One of ordinary skill in the art would be motivated to employ Bastiani in order to provide and optimize a more robust communications protocols between systems and peripherals in an interconnected network environment. (see Bastiani col. 2, lines 19-22: “... *serial protocol ... that defines a more robust data transmission environment for communication between host computers and peripheral devices ...*”)

### **Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K H S  
Kyung H Shin  
Patent Examiner  
Art Unit 2143

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KHS  
October 26, 2006

  
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